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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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10/670,598

09/26/2003

Ulrich R. Bernier

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25295 7590 09/30/2009  
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EXAMINER

CHOI, FRANK I

ART UNIT

PAPER NUMBER

1616

MAIL DATE

DELIVERY MODE

09/30/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                                      |                                       |  |
|------------------------------|--------------------------------------|---------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/670,598 | <b>Applicant(s)</b><br>BERNIER ET AL. |  |
|                              | <b>Examiner</b><br>FRANK I. CHOI     | <b>Art Unit</b><br>1616               |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 September 2009 and 14 August 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 43,44,48 and 51 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 43,44,48 and 51 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/14/2009 has been entered.

The Examiner notes that the present claims 43, 44, 48 and 51 are not the same as the claim amendment filed on 2/23/2009 but are the same as a previous amendment filed on 11/30/2007 which claims were subject to a scope of enablement rejection. As such, the Examiner reinstates the scope of enablement rejection herein below.

### ***Specification***

The disclosure is objected to because of the following informalities: Please amend related application data sentence to indicate that the divisional application 09/304,362 was filed on 05/04/1999. Appropriate correction is required.

Claim 43 objected to because of the following informalities: “ablimus” should be “albimanus”. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 43, 44, 48, 51 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the specific embodiments, i.e. those compounds or

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mixtures of compounds which were tested and found to be effective in attracting *Aedes aegypti*, *Aedes albopictus* and *Anopheles albimanus* does not reasonably provide enablement for the all compounds or mixtures of compounds with all mosquitoes. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make/and or use the invention commensurate in scope with these claims.

*The nature of the invention:*

The invention is directed to a method of exposing an environment with a composition comprising mosquito attracting amounts of lactic acid and butanone for attracting, which can further include dimethyl disulfide, a composition consisting of mosquito attracting amounts of glycolic acid and acetone and a method for attracting mosquitoes consisting essentially of mosquito attracting amounts of lactic acid, butanone and dimethyl disulfide.

*The state of the prior art and the predictability or lack thereof in the art:*

The prior art does not appear to disclose said methods and composition. Further, different species of mosquitos are effected differently, i.e. - attracted, repelled or non-responsive, by various compounds, including compounds falling within the scope of Applicant's invention (See Takken et al. (1999), pgs 140-45; Schreck et al. (1990), pg. 409, Table 2; Kline et al. (1990), pg. 386-90). Furthermore, even with respect to *Aedes aegypti*, altering the base structure of lactic acid has varying effects of the attractancy and/or repellancy of the lactic acid derivative to *Ae. aegypti* (See Carlson et al. (1973), pgs 329-331; Davis (1988), pg. 445, Table 1). As such, predictability in the art appears to be low.

*The amount of direction or guidance present and the presence or absence of working examples:*

The specification provides tests of numerous compounds for attracting *Aedes aegypti*, *Aedes albopictus* and *Anopheles albimanus* but different compounds and combinations had effected the mosquitoes differently – large attraction, moderate attraction, low attraction, no attraction or repellant effect (See Specification, pages 33-63). As such, it appears that attractancy can not be predicted readily and individualized tests must be performed even as between different species of mosquitoes.

*The breadth of the claims and the quantity of experimentation needed:*

The claims are broad in that they are directed to mosquitoes in general with mosquito attracting amounts of the claimed combinations of compounds. As such, one of ordinary skill in the art would be required to do undue experimentation in order to determine what amounts and combinations of said amounts of the claimed compounds would be effective for attracting a given species of mosquito.

The Examiner has duly considered the Applicant's arguments but deems them unpersuasive.

Although the Applicant has amended the preamble of claim 43 e to recite *Aedes aegypti*, *Aedes albopictus* and *Anopheles albimanus*, the preamble does not necessarily limit the claim to attracting the same. See e. g. *Jansen v. Rexall Sundown, Inc.*, 342 F.3d 1329, 1333, 68 USPQ2d 1154, 1158 (Fed. Cir. 2003)(In considering the effect of the preamble in a claim directed to a method of treating or preventing pernicious anemia in humans by administering a certain vitamin preparation to "a human in need thereof," the court held that the claims' recitation of a patient or a human "in need" gives life and meaning to the preamble's statement of purpose.). In that case, the body of the claim specifically referred to the population of patients in need of treatment there

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by limiting the claim to those patients in need of the claimed treatment set forth in the preamble. In this case, the body of the claim does not appear to need the preamble in order to be complete in that body of the claim does not specifically indicate that the mosquito attracting amounts refers to the species listed in the preamble. Thus, the claims still broadly encompass any mosquito attracting amount of lactic acid and butanone. As such, the rejection is maintained with respect to claims 43 and 44.

The Applicant has acknowledged the unpredictable nature of the art, as evidenced by Kline et al., in traversing the 35 USC 103 rejection of claim 51 (Remarks (11/30/2007), page 31). Claim 51 contains butanone which has been shown to be a mosquito repellant to more than one species of mosquito. The claims broadly encompass any mosquito attracting amount of the combination of lactic acid, butanone and dimethyl disulfide. As such, one of ordinary skill in the art would be required to do undue experimentation in order to determine what amounts would constitute a mosquito attracting amount for a given mosquito given the unpredictable nature of the art with respect to butanone.

### ***Conclusion***

A facsimile center has been established in Technology Center 1600. The hours of operation are Monday through Friday, 8:45 AM to 4:45 PM. The telecopier number for accessing the facsimile machine is 571-273-8300.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frank Choi whose telephone number is (571)272-0610. Examiner maintains a compressed schedule and may be reached Monday, Tuesday, Wednesday and Thursday, 6:00 am – 4:30 pm (EST).

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's Supervisor, Johann R. Richter, can be reached at (571)272-0646. Additionally, Technology Center 1600's Receptionist and Customer Service can be reached at (571) 272-1600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Frank Choi  
Patent Examiner  
Technology Center 1600  
September 30, 2009

/Johann R. Richter/  
Supervisory Patent Examiner, Art Unit 1616